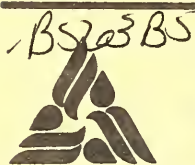


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# Biotechnology Notes

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**Biotechnology Notes**, a compilation of agency activities, news events, and upcoming meetings, is prepared for members of the U.S. Department of Agriculture's (USDA) Committee on Biotechnology in Agriculture (CBA) by USDA's Office of Agricultural Biotechnology (OAB).

## INSIDE USDA

### S.Y.I.M. (SEE YOU IN MONTEREY!)

Planners for the *Third International Symposium on the Biosafety Results of Field Tests of Genetically Modified Plants and Microorganisms* report that early registration is stronger than anticipated for the November 13-16 conference in Monterey, California. The rush to register has been attributed to the lineup of expert speakers, the focus of the agenda, and the success of the previous two symposia. A complete registration form is on page 5. A summary of the agenda is on page 6.

The event is co-sponsored by USDA; the European Commission; Japan's Society for Techno-Innovation in Agriculture, Fisheries and Forestry; the Environmental Protection Agency; Clemson University; and the University of California, Division of Agriculture and Natural Resources. To receive a program announcement and a complete agenda, please send your request by fax to OAB at 703-235-4429.

### USDA SEEKS PUBLIC COMMENTS ON CANOLA PETITION

Calgene Inc., Davis, CA, submitted a petition to USDA's Animal and Plant Health Inspection Service (APHIS), requesting that its product, genetically engineered Laurate canola, should not be regulated by APHIS "because it does not possess plant pest characteristics." The public has until August 15, 1994 to send in any comments on the petition.

Laurate canola has been field tested since 1992 in 16 field trials. Current sources of laurate (lauric acid) are coconut and palm kernel oils. According to Calgene, laurate is a major component of laundry detergent and shampoo. It is also found in edible form in nondairy coffee whitener and whipped toppings. To receive a copy of the petition, please call Kay Peterson at 301-436-7601. For more information, please call Sivramiah Shantharam at 301-436-7612.

## **HERBICIDE-TOLERANT SOYBEANS NO LONGER REGULATED**

USDA's APHIS has issued a determination that a line of glyphosate-tolerant soybeans does not present a plant pest risk and therefore no longer needs to be regulated by APHIS. The ruling became effective May 18. The petition for the determination of nonregulated status was submitted by Monsanto Company, St. Louis, MO, and the public was given 60 days to submit comments. APHIS received 33 comments and all but one were favorable to the petition.

The effect of the decision means permits and notifications will no longer be required from APHIS for field testing, importation, or interstate movement of those soybean lines or their progeny. For more information or a copy of the determination, please call Shirley Ingebritsen at 301-436-7601.

## **URUGUAYAN DELEGATION VISITS USDA**

Five senior government officials from Uruguay visited USDA to learn about biotechnology programs and information systems. Their tour was arranged by OAB with the cooperation of the Agricultural Research Service (ARS), the National Agricultural Library (NAL), and the Uruguayan Embassy. Highlights of their visit to ARS included presentations on biocontrol of plant diseases, the plant genome program, the livestock and poultry sciences institute, a visit to the germplasm and gamete physiology lab, transgenic animals, and the use of biotechnology in the control of animal diseases. The NAL's Biotechnology Information Center arranged for a dialogue and demonstration of the AGRICOLA and ISIS information systems.

Their tour to the United States also included briefings with industries and universities in California and Boston. In Washington, DC they were briefed by officials at the Office of the Vice President, the Office of Science and Technology Policy, and the Office of Technology Assessment. In addition, they learned about programs going on at the National Institute of Science and Technology, the National Institutes of Health, and the National Science Foundation.

The delegation was headed by Roberto Platero Vazquez, Uruguay's 1992 President of the Science and Technology Committee of the House, editor of the national newspaper "El Observado," President of the Industry and Energy Committee of the House, and Uruguay's former Minister of Agriculture.



## **NEWS AROUND THE NATION (AND THE WORLD)**

### **PIG DATABASE UP AND RUNNING**

A pig database is now operational and ready for business. Its files are still a bit sparse, but information will be loaded in the next few months and eventually the database will contain published data on mapping, gene identification, and probes. It will also support bit-mapped graphics.

To access the database, please send your name, address, phone, fax, e-mail address, an account name (first initials and seven characters of the last name), and password of your choosing (12 characters) to Max Rothschild, U.S. pig genome coordinator, at 515-294-2401 (fax). Rothschild's e-mail address is : mfrothsc@iastate.edu. For questions, please call Rothschild at 515-294-6202.

### **BIOTECH CLASSES OFFERED IN TAHOE**

The Catholic University of America is offering two biotech courses in Lake Tahoe, Nevada, October 17-20, 1994. The classes are Recombinant DNA Technology & DNA Sequencing and PCR Techniques & DNA Sequencing. For more details, please call 202-319-6161; or send a fax to 202-319-4467. The e-mail address is millerm@cua.edu

### **TOMORROW'S FARM**

In Golden, Colorado, scientists at the Department of Energy's (DOE) National Renewable Energy Laboratory are hard at work producing the farm of the future. Such farms will use biotechnology to generate energy from crops, such as hay, corn, soybeans, rapeseed, and sunflowers. At DOE's laboratory in Oak Ridge, Tennessee, researchers have already developed many of these energy crops and are ready to plant them. The goal is to harness the energy from the crops and use it to supply electricity, plastics, fertilizers, and biofuels. DOE predicts that once there is a market, energy industries and farmers will negotiate long-term contracts with each other so that growing energy crops will become profitable. For more information about this subject, please call either your local state agricultural experiment station, your county cooperative extension agent, the Biofuels Information Center at 303-231-1947, or DOE at 202-586-8072.

### **NOTE TO READERS**

It's been more than seven enjoyable years since OAB first began publishing *Biotechnology Notes*. I am preparing to take a three-month sabbatical and will return to OAB in October. A guest editor will join the staff during my absence and continue to issue the publication. See you in the Fall!

M.A.

## WORK UNDERWAY ON TRANSGENIC POTATOES

Add frost to the list of environmental stresses that affect potato production. In the Andean regions of South America, temperatures dip to 0 degrees C. Potatoes grow best when the soil temperature is 23 degrees C. Through international cooperation and advances in biotechnology, the potato may soon be able to grow and thrive in cold climates.

With technical support and promotion from the International Potato Centre, a potato tolerant to freezing is ready to be field tested. The cold-tolerance was made possible through the introduction of a flounder anti-freeze protein. Molecular tests confirmed the presence of the anti-freeze gene in the regenerated plants. This initiative was a co-operative effort of the University of Louisiana, the Central University of Venezuela and the Instituto Boliviano de Tecnologia Agropecuaria, one of the public agricultural research institutes in Bolivia with funding from the Andean Development Bank.

The transgenic plants have been tested in a greenhouse since 1993. Preliminary results indicate that a level of cold tolerance has been achieved. The next step should be field tests, which require a biosafety evaluation and clearance by national regulatory authorities. This cooperative effort shows the potential of international cooperation in transferring high technology to developing countries.

## IN CASE YOU WEREN'T THERE

■ In July 1992, the Upjohn Company petitioned USDA's APHIS requesting that its genetically engineered yellow crookneck summer squash no longer be considered a regulated article. To ensure as much public input as possible before making its final determination, the USDA has twice requested comments from the public and on June 21 held a public hearing in Washington, DC. Jane Rissler, senior scientist at the Union of Concerned Scientists, Washington, DC, opposed approval of the squash saying the environmental assessment is "scientifically unacceptable" and the squash could become weeds "or serve as conduits through which new genes move to wild plants that in turn become weeds."

Speaking in support of the petition was Dennis Gonsalves, professor of plant pathology at Cornell University, Geneva, NY. He said there is no data linking virus resistance to weediness and that genomic mixing occurs in nature all the time.

APHIS officials will now review all oral and written comments and make their decision about whether to de-regulate genetically engineered squash. For more details about the hearing, please call Shirley Ingebritsen at 301-436-7601.



## SYMPOSIUM REGISTRATION FORM

### *Third International Symposium on the Biosafety Results of Field Tests of Genetically Modified Plants and Microorganisms*

November 13-16, 1994, Monterey, California

Name \_\_\_\_\_ Title \_\_\_\_\_

Institution/Company \_\_\_\_\_

Name for Nametag \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Business Telephone (    ) \_\_\_\_\_ Fax # \_\_\_\_\_

Will you have a poster presentation    \_\_\_\_\_ Yes    \_\_\_\_\_ No

Tentative Title \_\_\_\_\_

I am interested in the Agriculture Tour of Monterey County on Thursday, November 17.    \_\_\_\_\_ Yes    \_\_\_\_\_ No

Because conference space is limited, briefly describe your experience pertinent to the topics of the symposium.

\_\_\_\_\_  
\_\_\_\_\_

Please attach check in U.S. dollars made out to:    Regents of the University of California

Registration should be sent to:

Ms. Pat Day  
University of California, DANR  
300 Lakeside Drive, 6th Floor  
Oakland, CA 94612-3560, USA

Registration Deadline: No later than September 30, 1994

Participants @ \$275.00; Each guest @ \$100.00 (includes evening reception, breakfasts and dinner fiesta)

**THIRD INTERNATIONAL SYMPOSIUM ON THE BIOSAFETY RESULTS OF FIELD  
TESTS OF GENETICALLY MODIFIED PLANTS AND MICROORGANISMS**

November 13 - 16, Monterey, California

**SUMMARY OF AGENDA**

November 13: Registration, Reception, Poster Set-up

November 14: Opening remarks, Welcoming address  
Keynote address: "Environmental and Social Impact of GMOs;  
What have we Learned From the Past Few Years?" Alain  
Deshayes, Director of Research, Institut National de Recherche  
Agronomique, Notre Dame D'Oe, France

Panel 1: Are Risks Scale Dependent? Can Small-Scale Results be  
Extrapolated? Are Longer-Term Effects an Issue?

Panel 2: Are There Unique Risks When Testing in Centers of Diversity?

Panel 3: Are There Unresolved Issues Regarding the Possible Generation  
of New Viral Pathogens from Transgenic Plants?

Evening workshops on databases for biosafety, public information, and new risk  
assessment paradigms

November 15:

Panel 4: Experiences With Microorganisms

Panel 5: Does Classical Toxicology Offer a Useful Perspective in Assessing  
the Food Safety of Products Produced by Biotechnology?

Panel 6: Experiences in Approaching Commercialization of Transgenic  
Crop Plants

November 16:

Panel 7: Experiences with New and Unique Organisms and Products



## NEW PUBLICATIONS

Two new bibliographic references from NAL:

- "Biotechnology: Legislation and Regulation: January 1989-January 1994." Quick bibliography series: QB 94-33; Updates QB 92-53. Prepared by K. Guenther and R. Dohert. Published by USDA's National Agricultural Library, Beltsville, MD. To request a copy, send the title, series number, and a self-addressed gummed label to: USDA, NAL, Public Service Division, Room 111, Beltsville, MD 20705.
- "BST -- Bovine Growth Hormone: January 1991-December 1993." QB series: 94-10. Prepared by J. Larson. Published by USDA's NAL, Beltsville, MD. To request a copy, send the title, series number, and a self-addressed gummed label to the above address.
- *Genetic Engineering: Principles and Methods, Volume 15.* Edited by J. K. Setlow. Published by Plenum, 1993. To order call 212-620-8047.
- *Marine Biotechnology. Volume 1: Pharmaceutical and Bioactive Natural Products.* Edited by D. H. Attaway and O. R. Zaborsky. Published by Plenum, 1993. To order call 212-620-8047.

## UPCOMING MEETINGS

- July 3-8:** "Seventh International Congress of Bacteriology." Applied microbiology and mycology divisions. Prague, Czech Republic. Sponsored by the Czechoslovak Society for Microbiology. For details write to SCS Travel Agency Ltd., IUMS Congresses '94, Boticka 4, 128 00 Prague 2, Czech Republic; or call 42 2 297 698; Fax: 42 2 299 955.
- July 4-6:** Biotech '94. Second UK Congress on Biotechnology. Brighton, UK. Call 44-0788-578-214; Fax: 44-0788-577-182.
- July 4-8:** International Symposium/Workshop on Environmental Biotechnology. University of Waterloo, Waterloo, Canada. Call 519-746-4979.
- July 17-24:** Genetics and Molecular Biology of Plant Nutrition, 5th International Symposium. Davis, CA. Call 916-752-1711; Fax: 916-752-4361.

**July 30-Aug. 3:** Annual Meeting of the American Society of Plant Physiologists. Portland, Oregon. For details call 301-251-0560; Fax: 301-279-2996.

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**Aug. 7-12:** Fifth World Congress on Genetics Applied to Livestock Production. Guelph, Ontario, Canada. Call 519-824-4210, ext. 2695; Fax: 519-767-0573; e-mail: gil5wcg@aps.uoguelph.ca

**Aug. 7-12:** Third International Marine Biotechnology Conference. Tromso, Norway. For details write to IMBC '94, NFH, University of Tromso, N-9037 Tromso, Norway; or send a fax to 47-776-71832.

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**Sept. 9-10:** Symposium on Down Regulation of Gene Expression by Antisense and Other Technologies. Ames, Iowa. Call 515-294-1063; Fax: 515-294-1337.

**Sept. 11-14:** "The Methodology of Plant Manipulation." Cork, Ireland. Fax: 353-21-274420.

**Biotechnology Notes** is written by Marti Asner, public affairs specialist in USDA's Office of Agricultural Biotechnology. Any comments or suggestions may be sent to USDA/OAB, Room 1001, Rosslyn Plaza-E, 14th and Independence Ave., S.W., Washington, DC 20250-2200. Telephone: 703-235-4419; Fax: 703-235-4429; e-mail: masner@csrs.esusda.gov. This news publication is also accessible on Internet via Gopher.

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